UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,644	01/12/2006	Stefan Oliver Czerner	5038.1018	8517

23280 7590 05/11/2010

Davidson, Davidson & Kappel, LLC
485 7th Avenue
14th Floor
New York, NY 10018

EXAMINER	
HEINRICH, SAMUEL M	

ART UNIT	PAPER NUMBER
3742	

MAIL DATE	DELIVERY MODE
05/11/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/556,644
Filing Date: January 12, 2006
Appellant(s): CZERNER ET AL.

William C. Gehris
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 12, 2010 appealing from the Office action mailed July 08, 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 11-21.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

Applicant's Admitted Prior Art (AAPA) Specification recites known hardfacing and known pre-heating and heating.

JP358106836A	Hitachi	06-1983
4,539,462	Plankenhorn	09-1985
4,857,699	Duley et al	08-1989
5,080,474	Miyamoto	01-1992
6,883,405	Strauch	04-2005
5,493,445	Sexton et al	02-1996
JP363149092A	Miyota Seimitsu	06-1988
DE4234339A1	Geiger	04-1994

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn.

AAPA describes ([0002]-[0004]) well known preheating prior to hardfacing.

JP358106836A describes use of a plurality of laser light sources wherein one source is used for preheat and a second different laser is used for heating or fusing.

Plankenhorn describes (column 1, lines 11-20) well known lasers used for "hardening and annealing operations".

The instant claimed process would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because preheat and hardfacing is well known, and simultaneous use of both preheat and heating beams is known and provides rapid processing.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of USPN 4,857,699 to Duley et al and in view of JP363149092A.

Duley et al describe (Abstract) laser processing and laser preprocessing.

JP363149092A describes opposite side processing.

The use of preprocessing and processing from opposite sides would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to rapidly process multiple workpieces.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of USPN 5,080,474 to Miyamoto.

Miyamoto describes (column 1, lines 18-28) well known adjustment of the incident angle of a laser and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to provide uniform energy distribution.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn in view of USPN 4,857,699 to Duley et al and in view of JP363149092A as applied to claim 14 above, and further in view of USPN 5,080,474 to Miyamoto.

Miyamoto describes (column 1, lines 18-28) well known adjustment of the incident angle of a laser and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to provide uniform energy distribution.

Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of DE4234339A1.

DE4234339A1 describes well known adjustment of power subsequent to measurement of a temperature and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to improve production quality.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn in view of USPN 4,857,699 to Duley et al and in view of JP363149092A as applied to claim 14 above, and further in view of DE4234339A1.

DE4234339A1 describes well known adjustment of power subsequent to measurement of a temperature and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to improve production quality.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN

4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of USPN 6,883,405 to Strauch.

Strauch describe (column 4, line 66) well known use of a diode laser and the use thereof would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art in order to provide suitable energy for heat treatment of a particular size workpiece.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of JP358106836A in view of USPN 4,539,462 to Plankenhorn as applied to claim 11 above, and further in view of USPN 5,493,445 to Sexton et al.

Sexton et al describe (column 6, lines 45-47) well known "subsequent processing" and the use thereof following a laser machining process such as heat treatment would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because it provides finishing for the workpiece.

(10) Response to Argument

Applicant argues that the Final Office Action fails to state what part of the claim is not found in the APA (Applicant's Prior Art), and that the Final Office Action does not address why or how one of skill in the art would provide any missing feature to the APA. Applicant's United States Patent Application Publication, Pub. No. US 20070017607 A1, describes [0003],[0004] known hardfacing during maintenance and repair, and describes known heating or pre-heating. The rejection stated that Applicant's

particularly claimed heating and hardfacing steps would have been obvious in order to provide rapid processing.

Applicant argues that laser hardfacing is not the same as hardening or annealing. This argument is not convincing. APA describes known hardfacing and Plankenhorn describes (column 1, lines 11-20) well known surface cladding, hardening, and annealing processes.

Applicant argues claim 15 and states Miyamoto shapes beams, but does not address adjusting laser angles of incidence with respect to the contour of the surface of the workpiece component. This argument is not convincing. Miyamoto pertains to laser surface treatment and adjusts the incident angle of the laser in order to uniformly apply energy to the surface. Note, Applicant's claim 15 broadly describes "adjusting angles of incidence at which laser radiation hit a surface of the component", but do not specify any particular change of surface contour. The surface being processed could be limited in contour to a simple flat outline feature.

Applicant argues claim 16 and argues that Miyamoto does not pertain to a plurality of surfaces. This argument is not convincing. Miyamoto was not used to show plural lasers irradiating plural surfaces. JP363149092A was used to show opposite side processing. The use of plural lasers is well known and the use of adjustment of the angle of incidence is well known. Adjusting an angle of incidence for plural lasers does not impart patentability to the claimed subject matter.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Samuel M Heinrich/

Primary Examiner, Art Unit 3742

Conferees:

/Henry Yuen/

Special Programs Examiner, TC 3700

/TU B HOANG/

Supervisory Patent Examiner, Art Unit 3742